Form Approved 1/14/99
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BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1. Facility Information.

Facility name: Massaponax Wastewater Treatment Facility

Mailing Address: 10900 HCC Drive, Fredericksburg, Virginia, 22408

Contact person: Doug Crooks

Title: Division Director Wastewater Treatment

Telephone number: (540) 507-7362

Facility Address (not P.O. Box): 10900 HCC Drive, Fredericksburg, Va. 22408

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name: Spotsylvania County Utilities Department

Mailing Address: 600 Hudgins Road, Fredericksburg, Va. 22408

Contact person: Doug Crooks

Title: Division Director Wastewater Treatment

Telephone number: (540) 507-7362

Is the applicant the owner or operator (or both) of the treatment works?

✓ owner ✓ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

✓ facility _____ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0029513 PSD _____

UIC _____ Other VAN020055

RCRA _____ Other VAR051422

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
	93,050	Separate	Municipal

Total population served 93,050

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

_____ Yes ✓ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

_____ Yes ✓ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 8.0 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	5.48	5.43	5.32	mgd
c. Maximum daily flow rate	14.27	12.10	15.01	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✓ Separate sanitary sewer	100 %
_____ Combined storm and sanitary sewer	_____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✓ Yes _____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent	1
ii. Discharges of untreated or partially treated effluent	0
iii. Combined sewer overflow points	0
iv. Constructed emergency overflows (prior to the headworks)	0
v. Other _____	0

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? _____ Yes ✓ No

If yes, provide the following for each surface impoundment:

Location: _____

Annual average daily volume discharged to surface impoundment(s) _____ mgd

Is discharge _____ continuous or _____ intermittent?

c. Does the treatment works land-apply treated wastewater? _____ Yes ✓ No

If yes, provide the following for each land application site:

Location: _____

Number of acres: _____

Annual average daily volume applied to site: _____ Mgd

Is land application _____ continuous or _____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? _____ Yes ✓ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

_____

If transport is by a party other than the applicant, provide:

Transporter name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

For each treatment works that receives this discharge, provide the following:

Name: _____

Mailing Address: _____

_____

Contact person: _____

Title: _____

Telephone number: _____

If known, provide the NPDES permit number of the treatment works that receives this discharge. _____

Provide the average daily flow rate from the treatment works into the receiving facility. _____ mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? _____ Yes ✓ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

_____

Annual daily volume disposed of by this method: _____

Is disposal through this method _____ continuous or _____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number: 001

b. Location:
Fredericksburg (City or town, if applicable) — 22408 (Zip Code)
Spotsylvania (County) — Virginia (State)
38 15 20 N (Latitude) — 77 24 50 W (Longitude)

c. Distance from shore (if applicable): N/A ft.

d. Depth below surface (if applicable): N/A ft.

e. Average daily flow rate: 5.32 mgd

f. Does this outfall have either an intermittent or a periodic discharge? ____ Yes ✓ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: ____

Average duration of each discharge: ____

Average flow per discharge: ____ mgd

Months in which discharge occurs: ____

g. Is outfall equipped with a diffuser? ____ Yes ✓ No

A.10. Description of Receiving Waters.

a. Name of receiving water: Rappahannock River

b. Name of watershed (if known): Rappahannock River

United States Soil Conservation Service 14-digit watershed code (if known): ____

c. Name of State Management/River Basin (if known): ____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): ____

d. Critical low flow of receiving stream (if applicable):
acute 43.1 cfs chronic 52.4 cfs

e. Total hardness of receiving stream at critical low flow (if applicable): 50 mg/l of $CaCO_3$

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A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary ✓ Secondary
✓ Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	95	%
Design SS removal	95	%
Design P removal	95	%
Design N removal	95	%
Other _____	_____	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

Ultraviolet Light

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _____ No

d. Does the treatment plant have post aeration? ✓ Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.38	s.u.			
pH (Maximum)	7.31	s.u.			
Flow Rate	15.01	MGD	5.32	MGD	365
Temperature (Winter)	12.6	C	13.9	C	90
Temperature (Summer)	25.4	C	24.2	C	90

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5							
DEMAND (Report one)	CBOD-5	9.5	mg/l	2.6	mg/l	730	SM18 5210B	2 mg/l
FECAL COLIFORM		410	MPN	2.1	MPN	730	Colilert	1 MPN
TOTAL SUSPENDED SOLIDS (TSS)		14.5	mg/l	1.1	mg/l	730	SM18 2540-D	1.0 mg/l

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

100,000 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

Continuining program of line and manhole rehabilitation

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ____Yes ✓ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name: _____

Mailing Address: _____

_____

Telephone Number: _____

Responsibilities of Contractor: _____

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

001

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

____Yes ✓ No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

Expansion to 9.4 MGD currently underway.

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	01 / 25 / 2011	___/___/_____
– End construction	07 / 31 / 2012	___/___/_____
– Begin discharge	___/___/_____	___/___/_____
– Attain operational level	___/___/_____	___/___/_____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ✓ No

Describe briefly: None required

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	1.9	mg/l	0.2	mg/l	308	SM184500-NH3F	0.1 mg/l
CHLORINE (TOTAL RESIDUAL, TRC)	<QL	mg/l	<QL	mg/l	730	SM18 4500CL-G	0.2 mg/l
DISSOLVED OXYGEN	8.46	mg/l	6.86	mg/l	365	SM4500-OG	0.1 mg/l
TOTAL KJELDAHL NITROGEN (TKN)	4.52	mg/l	1.67	mg/l	50	SM18 4500-NH3	0.1 mg/l
NITRATE PLUS NITRITE NITROGEN	4.57	mg/l	2.36	mg/l	50	SM18 4500NO3E	0.05 mg/l
OIL and GREASE	<5	mg/l	<5	mg/l	3	EPA1664	5 mg/l
PHOSPHORUS (Total)	0.36	mg/l	0.13	mg/l	50	SM18 4500-PE	0.025 mg/l
TOTAL DISSOLVED SOLIDS (TDS)	297	mg/l	279	mg/l	3	SM18 2540C	1 mg/l
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Massaponax Wastewater Treatment Facility - VA0025658

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BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

✓ Basic Application Information packet

Supplemental Application Information packet:

✓ Part D (Expanded Effluent Testing Data)

✓ Part E (Toxicity Testing: Biomonitoring Data)

✓ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Edward Petrovitch, Director of Public Utilities

Signature: Edw Petr

Telephone number: (540) 507-7300

Date signed: 01/30/12

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	<DL				<DL				3	EPA200.7	0.005 mg/l
ARSENIC	<DL				<DL				3	EPA200.7	0.005 mg/l
BERYLLIUM	<DL				<DL				3	EPA200.7	0.001 mg/l
CADMIUM	<DL				<DL				3	EPA200.7	0.005 mg/l
CHROMIUM	<DL				<DL				3	EPA200.7	0.005 mg/l
COPPER	0.007	mg/l	0.14	Kg/D	0.006	mg/l	0.12	Kg/D	3	EPA200.7	0.001 mg/l
LEAD	<DL				<DL				3	EPA200.7	0.005 mg/l
MERCURY	<DL				<DL				3	EPA200.7	0.001 mg/l
NICKEL	<DL				<DL				3	EPA200.7	0.005 mg/l
SELENIUM	<DL				<DL				3	EPA200.7	0.005 mg/l
SILVER	<DL				<DL				3	EPA200.7	0.005 mg/l
THALLIUM	<DL				<DL				3	EPA200.7	0.005 mg/l
ZINC	0.049	mg/l	0.99	Kg/D	0.044	mg/l	0.89	Kg/D	3	EPA200.7	0.005 mg/l
CYANIDE	<DL				<DL				3	EPA335.4	0.005 mg/l
TOTAL PHENOLIC COMPOUNDS	<DL				<DL				3	EPA420.2	0.1 mg/l
HARDNESS (AS $CaCO_3$)	70	mg/l	1409	Kg/D	64	mg/l	1289	Kg/D	3	SM2340-200.7	2 mg/l
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

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POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	<DL				<DL				3	EPA624	0.005 mg/l
ACRYLONITRILE	<DL				<DL				3	EPA624	0.005 mg/l
BENZENE	<DL				<DL				3	EPA624	0.001 mg/l
BROMOFORM	<DL				<DL				3	EPA624	0.001 mg/l
CARBON TETRACHLORIDE	<DL				<DL				3	EPA624	0.001 mg/l
CLOROBENZENE	<DL				<DL				3	EPA624	0.001 mg/l
CHLORODIBROMO-METHANE	<DL				<DL				3	EPA624	0.001 mg/l
CHLOROETHANE	<DL				<DL				3	EPA624	0.001 mg/l
2-CHLORO-ETHYLVINYL ETHER	<DL				<DL				3	EPA624	0.001 mg/l
CHLOROFORM	0.011	mg/l	0.22	Kg/D	0.009	mg/l	0.18	Kg/D	3	EPA624	0.001 mg/l
DICHLOROBROMO-METHANE	0.002	mg/l	0.04	Kg/D	.0007	mg/l	0.01	Kg/D	3	EPA624	0.001 mg/l
1,1-DICHLOROETHANE	<DL				<DL				3	EPA624	0.001 mg/l
1,2-DICHLOROETHANE	<DL				<DL				3	EPA624	0.001 mg/l
TRANS-1,2-DICHLORO-ETHYLENE	<DL				<DL				3	EPA624	0.001 mg/l
1,1-DICHLOROETHYLENE	<DL				<DL				3	EPA624	0.001 mg/l
1,2-DICHLOROPROPANE	<DL				<DL				3	EPA624	0.001 mg/l
1,3-DICHLORO-PROPYLENE	<DL				<DL				3	EPA624	0.001 mg/l
ETHYLBENZENE	<DL				<DL				3	EPA624	0.001 mg/l
METHYL BROMIDE	<DL				<DL				3	EPA624	0.001 mg/l
METHYL CHLORIDE	<DL				<DL				3	EPA624	0.001 mg/l
METHYLENE CHLORIDE	<DL				<DL				3	EPA624	0.001 mg/l
1,1,2,2-TETRACHLORO-ETHANE	<DL				<DL				3	EPA624	0.001 mg/l
TETRACHLORO-ETHYLENE	<DL				<DL				3	EPA624	0.001 mg/l
TOLUENE	<DL				<DL				3	EPA624	0.001 mg/l

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	<DL				<DL				3	EPA624	0.001 mg/l
1,1,2-TRICHLOROETHANE	<DL				<DL				3	EPA624	0.001 mg/l
TRICHLORETHYLENE	<DL				<DL				3	EPA624	0.001 mg/l
VINYL CHLORIDE	<DL				<DL				3	EPA624	0.001 mg/l
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL	<DL				<DL				3	EPA625	0.005 mg/l
2-CHLOROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
2,4-DICHLOROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
2,4-DIMETHYLPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
4,6-DINITRO-O-CRESOL	<DL				<DL				3	EPA625	0.005 mg/l
2,4-DINITROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
2-NITROPHENOL	<DL				<DL				3	EPA625	0.001 mg/l
4-NITROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
PENTACHLOROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
PHENOL	<DL				<DL				3	EPA625	0.005 mg/l
2,4,6-TRICHLOROPHENOL	<DL				<DL				3	EPA625	0.005 mg/l
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE	<DL				<DL				3	EPA625	0.005 mg/l
ACENAPHTHYLENE	<DL				<DL				3	EPA625	0.005 mg/l
ANTHRACENE	<DL				<DL				3	EPA625	0.005 mg/l
BENZIDINE	<DL				<DL				3	EPA625	0.005 mg/l
BENZO(A)ANTHRACENE	<DL				<DL				3	EPA625	0.005 mg/l
BENZO(A)PYRENE	<DL				<DL				3	EPA625	0.005 mg/l

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POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	<DL				<DL				3	EPA625	0.005 mg/l
BENZO(GHI)PERYLENE	<DL				<DL				3	EPA625	0.005 mg/l
BENZO(K)FLUORANTHENE	<DL				<DL				3	EPA625	0.005 mg/l
BIS (2-CHLOROETHOXY) METHANE	<DL				<DL				3	EPA625	0.005 mg/l
BIS (2-CHLOROETHYL)-ETHER	<DL				<DL				3	EPA625	0.005 mg/l
BIS (2-CHLOROISO-PROPYL) ETHER	<DL				<DL				3	EPA625	0.005 mg/l
BIS (2-ETHYLHEXYL) PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
4-BROMOPHENYL PHENYL ETHER	<DL				<DL				3	EPA625	0.005 mg/l
BUTYL BENZYL PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
2-CHLORONAPHTHALENE	<DL				<DL				3	EPA625	0.005 mg/l
4-CHLORPHENYL PHENYL ETHER	<DL				<DL				3	EPA625	0.005 mg/l
CHRYSENE	<DL				<DL				3	EPA625	0.005 mg/l
DI-N-BUTYL PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
DI-N-OCTYL PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
DIBENZO(A,H) ANTHRACENE	<DL				<DL				3	EPA625	0.005 mg/l
1,2-DICHLOROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
1,3-DICHLOROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
1,4-DICHLOROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
3,3-DICHLOROBENZIDINE	<DL				<DL				3	EPA625	0.005 mg/l
DIETHYL PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
DIMETHYL PHTHALATE	<DL				<DL				3	EPA625	0.005 mg/l
2,4-DINITROTOLUENE	<DL				<DL				3	EPA625	0.005 mg/l
2,6-DINITROTOLUENE	<DL				<DL				3	EPA625	0.005 mg/l
1,2-DIPHENYLHYDRAZINE	<DL				<DL				3	EPA625	0.005 mg/l

FACILITY NAME AND PERMIT NUMBER:
Massaponax Wastewater Treatment Facility - VA0025658

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	<DL				<DL				3	EPA625	0.005 mg/l
FLUORENE	<DL				<DL				3	EPA625	0.005 mg/l
HEXACHLOROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
HEXACHLOROBUTADIENE	<DL				<DL				3	EPA625	0.005 mg/l
HEXACHLOROCYCLO-PENTADIENE	<DL				<DL				3	EPA625	0.005 mg/l
HEXACHLOROETHANE	<DL				<DL				3	EPA625	0.005 mg/l
INDENO(1,2,3-CD)PYRENE	<DL				<DL				3	EPA625	0.005 mg/l
ISOPHORONE	<DL				<DL				3	EPA625	0.005 mg/l
NAPHTHALENE	<DL				<DL				3	EPA625	0.005 mg/l
NITROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
N-NITROSODI-N-PROPYLAMINE	<DL				<DL				3	EPA625	0.005 mg/l
N-NITROSODI- METHYLAMINE	<DL				<DL				3	EPA625	0.005 mg/l
N-NITROSODI-PHENYLAMINE	<DL				<DL				3	EPA625	0.005 mg/l
PHENANTHRENE	<DL				<DL				3	EPA625	0.005 mg/l
PYRENE	<DL				<DL				3	EPA625	0.005 mg/l
1,2,4-TRICHLOROBENZENE	<DL				<DL				3	EPA625	0.005 mg/l
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

____Yes____No If yes, describe: _____

_____

_____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

Data previously submitted: 08/2008, 10/2009, 10/2010 & 08/2011

_____

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. **Pretreatment Program.** Does the treatment works have, or is it subject to, an approved pretreatment program?

✓ Yes ____ No

F.2. **Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs).** Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 0

b. Number of CIUs. 0

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. **Significant Industrial User Information.** Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: _____

Mailing Address: _____

_____

F.4. **Industrial Processes.** Describe all of the industrial processes that affect or contribute to the SIU's discharge.

_____

F.5. **Principal Product(s) and Raw Material(s).** Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): _____

Raw material(s): _____

F.6. **Flow Rate.**

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

_____ gpd (_____continuous or _____intermittent)

F.7. **Pretreatment Standards.** Indicate whether the SIU is subject to the following:

a. Local limits ____Yes ____No

b. Categorical pretreatment standards ____Yes ____No

If subject to categorical pretreatment standards, which category and subcategory?

_____

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes____No If yes, describe each episode.

_____

_____

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ✓No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ✓No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

_____

_____

_____

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

_____

_____

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

_____

_____

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

_____

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

If the treatment works has a combined sewer system, complete Part G.

G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)

a. All CSO discharge points.

b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).

c. Waters that support threatened and endangered species potentially affected by CSOs.

G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information:

a. Locations of major sewer trunk lines, both combined and separate sanitary.

b. Locations of points where separate sanitary sewers feed into the combined sewer system.

c. Locations of in-line and off-line storage structures.

d. Locations of flow-regulating devices.

e. Locations of pump stations.

CSO OUTFALLS:

Complete questions G.3 through G.6 once for each CSO discharge point.

G.3. Description of Outfall.

a. Outfall number _____

b. Location _____
(City or town, if applicable) (Zip Code)

_____
(County) (State)

_____
(Latitude) (Longitude)

c. Distance from shore (if applicable) _____ft.

d. Depth below surface (if applicable) _____ft.

e. Which of the following were monitored during the last year for this CSO?

____Rainfall ____CSO pollutant concentrations ____CSO frequency

____CSO flow volume ____Receiving water quality

f. How many storm events were monitored during the last year? _____

G.4. CSO Events.

a. Give the number of CSO events in the last year.

_____ events (___ actual or ___ approx.)

b. Give the average duration per CSO event.

_____ hours (____ actual or ____ approx.)

c. Give the average volume per CSO event.

_____ million gallons (_____ actual or _____ approx.)

d. Give the minimum rainfall that caused a CSO event in the last year.

_____ inches of rainfall

G.5. Description of Receiving Waters.

a. Name of receiving water: _____

b. Name of watershed/river/stream system: _____

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin: _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

G.6. CSO Operations.

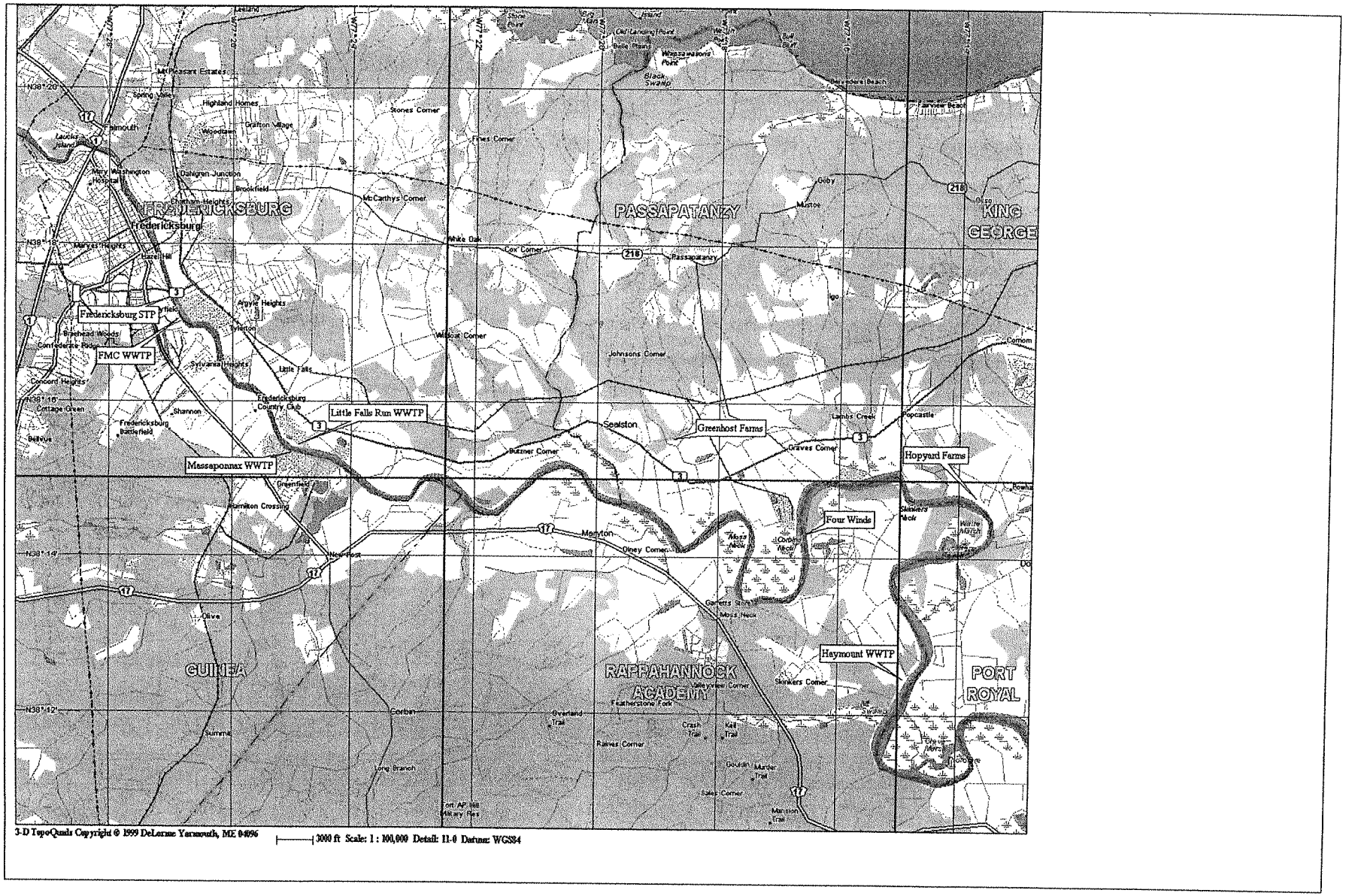
Describe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, permanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water quality standard).

_____

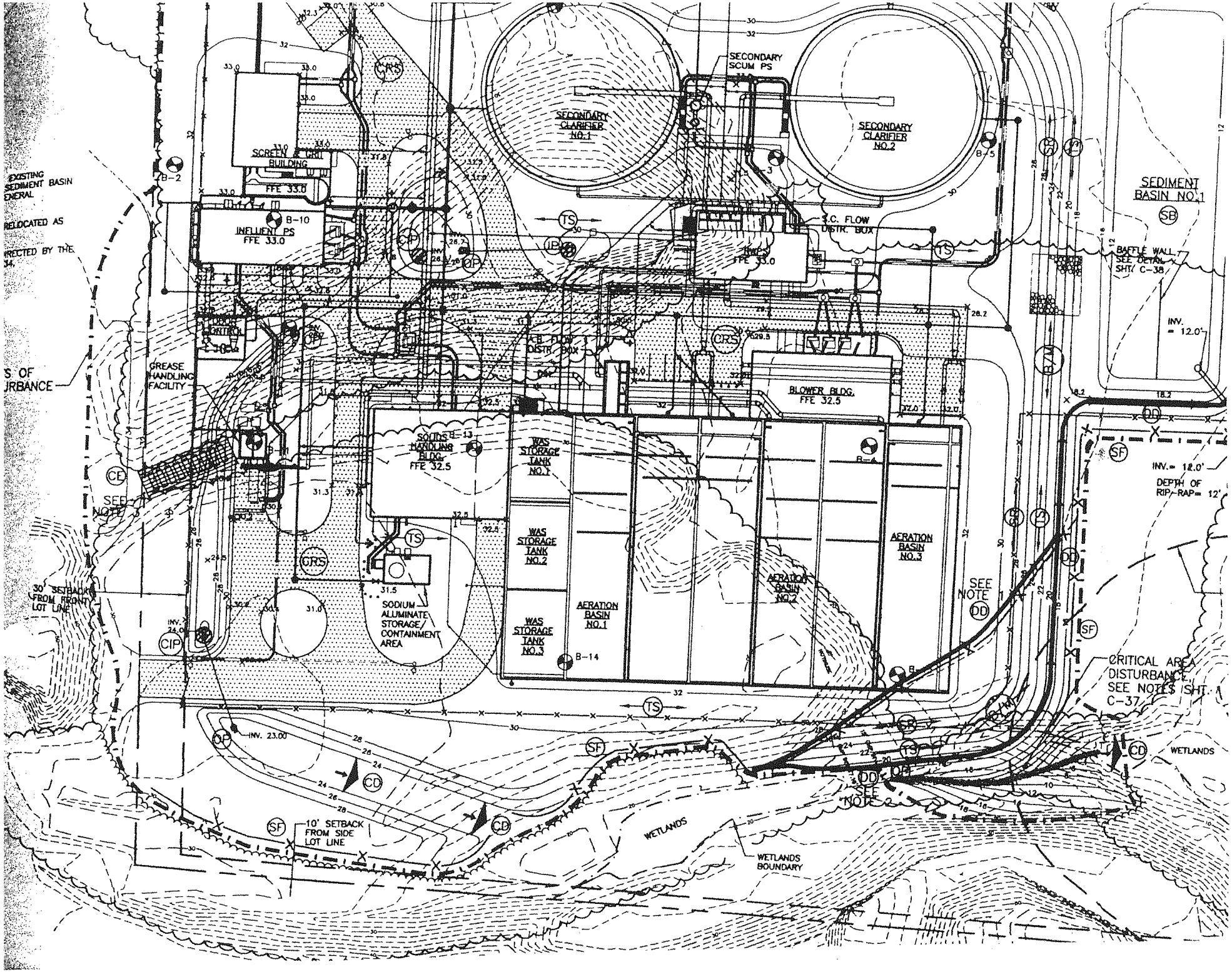
_____

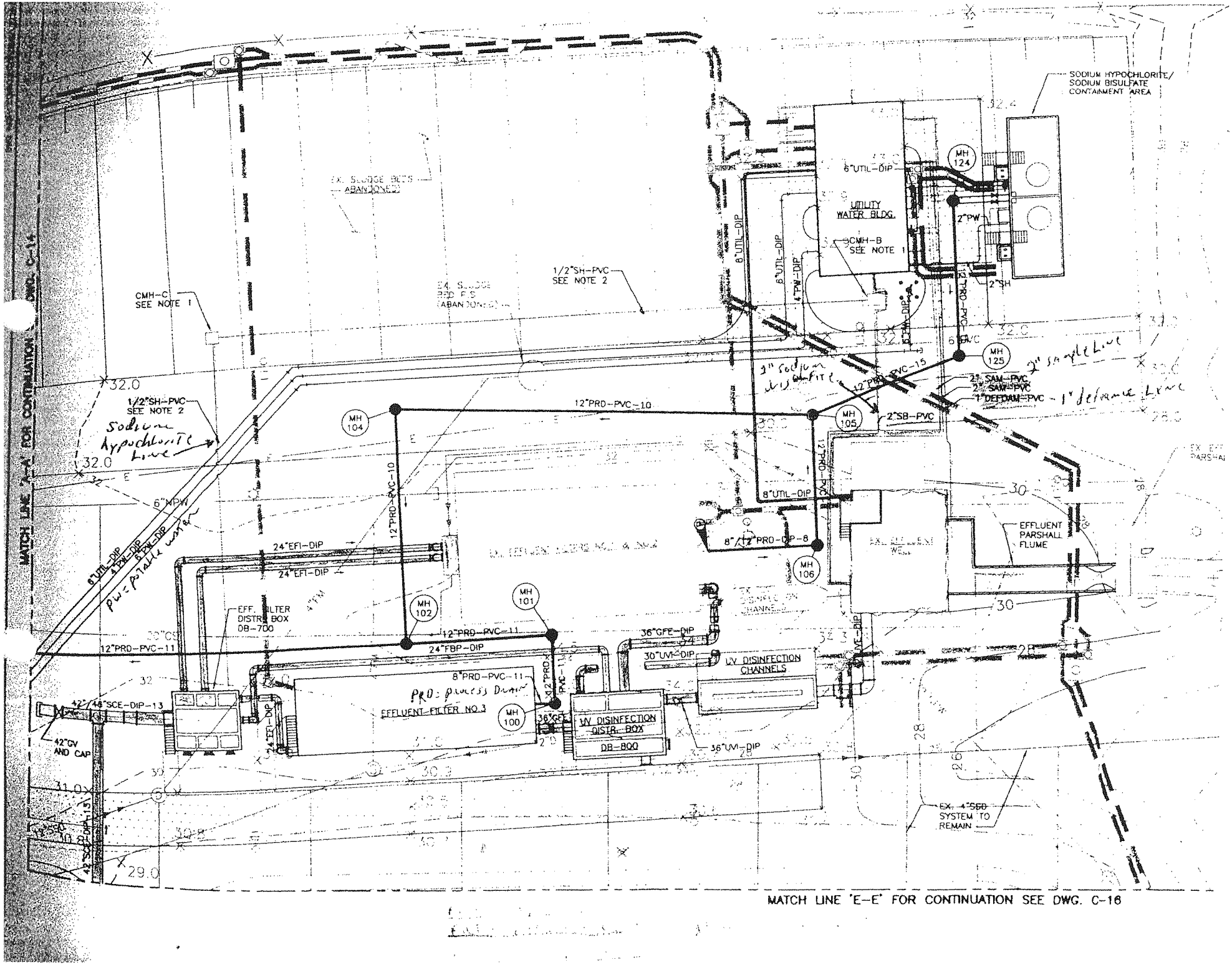
END OF PART G.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

Additional information, if provided, will appear on the following pages.



Attachment 4


SECONDARY SCUM PS
SECONDARY CLARIFIER NO.1
SECONDARY CLARIFIER NO.2
SCREEN & GRIT BUILDING
FFE 33.0
B-10
INFLUENT PS
FFE 33.0
B-2
B-5
S.C. FLOW DISTR. BOX
SEDIMENT BASIN NO.1
BAFFLE WALL, SEE DETAIL SHT/ C-38
INV. = 12.0'
DEPTH OF RIP-RAP= 12'
GREASE HANDLING FACILITY
BLOWER BLDG. FFE 32.5
SOLIDS HANDLING BLDG. FFE 32.5
B-13
WAS STORAGE TANK NO.1
WAS STORAGE TANK NO.2
WAS STORAGE TANK NO.3
AERATION BASIN NO.1
AERATION BASIN NO.2
AERATION BASIN NO.3
B-14
B-4
SODIUM ALUMINATE STORAGE/ CONTAINMENT AREA
SEE NOTE
30' SETBACK FROM FRONT LOT LINE
10' SETBACK FROM SIDE LOT LINE
INV. 23.00
CRITICAL AREA DISTURBANCE, SEE NOTES SHT. C-37
WETLANDS
WETLANDS BOUNDARY
S OF URBANCE
EXISTING SEDIMENT BASIN ENERAL
RELOCATED AS
RECTED BY THE 34.


MATCH LINE 'A-A' FOR CONTINUATION SEE DWG. C-14
SODIUM HYPOCHLORITE/ SODIUM BISULFATE CONTAINMENT AREA
MH 124
6"UTIL-DIP
UTILITY WATER BLDG.
2"PW
CMH-B SEE NOTE 1
2"SH
8"UTIL-DIP
4"PW-DIP
12"PRD-PVC-15
MH 125
2" SAMPLE LINE
2" SAM-PVC
2" SAW-PVC
1" DEFDAW-PVC - 1" DEFRINSE LINE
2"SB-PVC
CMH-C SEE NOTE 1
1/2"SH-PVC SEE NOTE 2
Sodium Hypochlorite Line
MH 104
12"PRD-PVC-10
MH 105
6"NPW
8"UTIL-DIP
8"x12"PRD-DIP-8
MH 106
EFFLUENT PARSHALL FLUME
24"EFI-DIP
24"EFI-DIP
Pw=potable water
8"UTIL-DIP
4"PW-DIP
6"PW-DIP
MH 102
MH 101
EFF. FILTER DISTR. BOX DB-700
12"PRD-PVC-11
12"PRD-PVC-11
24"FBP-DIP
36"GFE-DIP
30"UVI-DIP
UV DISINFECTION CHANNELS
8"PRD-PVC-11
PRD: process Drain
EFFLUENT FILTER NO.3
MH 100
36"GFE
UV DISINFECTION DISTR. BOX DB-800
36"UVI-DIP
42"/48"SCE-DIP-13
42"GV AND CAP
24"FTR-DIP
EX. 4"SSD SYSTEM TO REMAIN
MATCH LINE 'E-E' FOR CONTINUATION SEE DWG. C-16

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Spotsylvania County Utilities Department

Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Yes ☐ No X

3. **Provide the tax map parcel number for the land where the discharge is located.** Page 26, A, Lot 1

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** None

5. **What is the design average effluent flow of this facility?** 8.0 MGD
For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes X No
If "Yes", please identify the other flow tiers (in MGD) or production levels:
9.4 MGD

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. **Nature of operations generating wastewater:**
Normal municipal usage

90 % of flow from domestic

Number of private residences to be served by the treatment works: 20,000

10 % of flow from non-domestic connections/sources

7. **Mode of discharge:** X Continuous Intermittent Seasonal
Describe frequency and duration of intermittent or seasonal discharges:

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**

X Permanent stream, never dry

___ Intermittent stream, usually flowing, sometimes dry

___ Ephemeral stream, wet-weather flow, often dry

___ Effluent-dependent stream, usually or always dry without effluent flow

___ Lake or pond at or below the discharge point

___ Other:

9. **Approval Date(s):**
O & M Manual October 2007 **Sludge/Solids Management Plan** February 2011

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No X

FACILITY NAME: Massaponax WWTF **VPDES PERMIT NUMBER:** VA0025658

VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into four sections. Section A pertains to all applicants. The applicability of Sections B, C and D depends on your facility's sewage sludge use or disposal practices. The information provided on this page will help you determine which sections to fill out.

1. All applicants must complete Section A (General Information).

2. Does this facility generate sewage sludge? __X___ Yes _____ No

   Does this facility derive a material from sewage sludge? _____ Yes ___X__ No

   If you answered "Yes" to either, complete Section B (Generation Of Sewage Sludge or Preparation Of A Material Derived From Sewage Sludge).

3. Does this facility apply sewage sludge to the land? _____ Yes __X___ No

   Is sewage sludge from this facility applied to the land? _____ Yes __X___ No

   If you answer "No" to all above, skip Section C.

   If you answered "Yes" to either, answer the following three questions:

   a. Does the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 1-8, as identified in the instructions? _____ Yes _____ No

   b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away for application to the land? _____ Yes _____ No

   c. Is sewage sludge from this facility sent to another facility for treatment or blending? _____ Yes _____ No

   If you answered "No" to all three, complete Section C (Land Application Of Bulk Sewage Sludge).

   If you answered "Yes" to a, b or c, skip Section C.

4. Do you own or operate a surface disposal site? _____ Yes __X___ No

   If "Yes", complete Section D (Surface Disposal).

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

1. Facility Information.

a. Facility name: Massaponax WWTF

b. Contact person: Doug Crooks

Title: Director Wastewater Treatment Division

Phone: (540) 507-7362

c. Mailing address:

Street or P.O. Box: 10900 HCC Drive

City or Town: Fredericksburg State: Virginia Zip: 22408

d. Facility location:

Street or Route #: 10900 HCC Drive

County: Spotsylvania

City or Town: Fredericksburg State: Virginia Zip: 22408

e. Is this facility a Class I sludge management facility? _____ Yes __X___ No

f. Facility design flow rate: 8.0 mgd

g. Total population served: 93,050

h. Indicate the type of facility:

__X__ Publicly owned treatment works (POTW)

_____ Privately owned treatment works

_____ Federally owned treatment works

_____ Blending or treatment operation

_____ Surface disposal site

_____ Other (describe): _____

2. Applicant Information. If the applicant is different from the above, provide the following:

a. Applicant name: Spotsylvania County Utilities Department

b. Mailing address:

Street or P.O. Box: 600 Hudgins Rd.

City or Town: Fredericksburg State: Va. Zip: 22408

c. Contact person: Edward Petrovitch

Title: Director Public Utilities/Public Works

Phone: (540) 507-7302

d. Is the applicant the owner or operator (or both) of this facility?

_____ owner __X___ operator

e. Should correspondence regarding this permit be directed to the facility or the applicant?

__X___ facility _____ applicant

3. Permit Information.

a. Facility's VPDES permit number (if applicable): VA0025658

b. List on this form or an attachment, all other federal, state or local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number:	Type of Permit:
_____	_____
_____	_____

4. **Indian Country.** Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? _____ Yes __x___ No If "Yes", describe:

5. **Topographic Map.** Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:
   a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed.
   b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

6. **Line Drawing.** Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

7. **Contractor Information.** Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? _____ Yes __X___ No

   If "Yes", provide the following for each contractor (attach additional pages if necessary).

   Name:

   Mailing address:

   Street or P.O. Box:

   City or Town: State: Zip:

   Phone:

   Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:

   If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).

8. **Pollutant Concentrations.** Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	2.9	2011, July, Aug, & Sept	SW-846 610 C	0.05
Cadmium	<1.25	2011, July, Aug, & Sept	SW-846 610 C	1.25
Chromium	15.4	2011, July, Aug, & Sept	SW-846 610 C	2.5
Copper	450.9	2011, July, Aug, & Sept	SW-846 610 C	0.05
Lead	21.7	2011, July, Aug, & Sept	SW-846 610 C	0.2
Mercury	0.3	2011, July, Aug, & Sept	SW-846 7471B	0.1
Molybdenum	4.4	2011, July, Aug, & Sept	SW-846 610 C	0.005
Nickel	9.2	2011, July, Aug, & Sept	SW-846 610 C	0.5

Selenium	7.1	2011, July, Aug, & Sept	SW-846 610 C	0.15
Zinc	617	2011, July, Aug, & Sept	SW-846 610 C	0.6

9. **Certification.** Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting:

__X___ Section A (General Information)

__X__ Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

_____ Section C (Land Application of Bulk Sewage Sludge)

_____ Section D (Surface Disposal)

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name and official title: Edward Petrovitch

Signature _____ Date Signed 01/30/12

Telephone number (540) 507-7302

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. **Amount Generated On Site.**
   Total dry metric tons per 365-day period generated at your facility: 1.079 dry metric tons

2. **Amount Received from Off Site.** If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
   a. Facility name:
   b. Contact Person:
      Title:
      Phone:
   c. Mailing address:
      Street or P.O. Box:
      City or Town: _____State:
   d. Facility location:
      (not P.O. Box)
   e. Total dry metric tons per 365-day period received from this facility: dry metric tons
   f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

3. **Treatment Provided at Your Facility.**
   a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
      _____ Class A _____ Class B ___X__ Neither or unknown
   b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerated sludge storage
   c. Which vector attraction reduction option is met for the sewage sludge at your facility?
      _____ Option 1 (Minimum 38 percent reduction in volatile solids)
      _____ Option 2 (Anaerobic process, with bench-scale demonstration)
      _____ Option 3 (Aerobic process, with bench-scale demonstration)
      _____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
      _____ Option 5 (Aerobic processes plus raised temperature)
      _____ Option 6 (Raise pH to 12 and retain at 11.5)
      _____ Option 7 (75 percent solids with no unstabilized solids)
      _____ Option 8 (90 percent solids with unstabilized solids)
      __X___ None or unknown
   d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Aerated sludge storage
   e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: _____

4. **Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One of Vector Attraction Reduction Options 1-8 (EQ Sludge).**
   (If sewage sludge from your facility does not meet all of these criteria, skip Question 4.)

a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
_____ dry metric tons

b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?
_____ Yes _____ No

5. Sale or Give-Away in a Bag or Other Container for Application to the Land.

(Complete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this question if sewage sludge is covered in Question 4.)

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away for application to the land: _____ dry metric tons

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.

6. Shipment Off Site for Treatment or Blending.

(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)

a. Receiving facility name: Livingston Blend Compost Facility

b. Facility contact: Doug Crooks
Title: Director Wastewater Treatment Division
Phone: (540) 507-7362

c. Mailing address:
Street or P.O. Box: 10900 HCC Drive
City or Town: Fredericksburg State: Virginia Zip: 22408

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility:
1,079 dry metric tons

e. List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:

Permit Number:	Type of Permit:
VPA00065	VPA
_____	_____

f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility?
__X__ Yes _____ No
Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?
__X_ Class A _____ Class B _____ Neither or unknown
Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge: Static Pile Composting

g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? __X___ Yes _____ No
Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
_____ Option 1 (Minimum 38 percent reduction in volatile solids)
_____ Option 2 (Anaerobic process, with bench-scale demonstration)
_____ Option 3 (Aerobic process, with bench-scale demonstration)
_____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
__X___ Option 5 (Aerobic processes plus raised temperature)
_____ Option 6 (Raise pH to 12 and retain at 11.5)

_____ Option 7 (75 percent solids with no unstabilized solids)

_____ Option 8 (90 percent solids with unstabilized solids)

_____ None unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge: _____

h. Does the receiving facility provide any additional treatment or blending not identified in f or g above?
_____ Yes __X___ No

If "Yes", describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:

i. If you answered "Yes" to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.

j Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? _____ Yes __X___ No

If "Yes", provide a copy of all labels or notices that accompany the product being sold or given away.

k. Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? __X___ Yes _____ No. If "No", provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.

Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week and the times of the day sewage sludge will be transported. HCC Drive to left on Rt. 17 East, Rt. 17 East to left on Rt. 1 North, Rt. 1 North to left on Rt. 208 West, Rt.208 West to left onto Massey Rd.

7. **Land Application of Bulk Sewage Sludge.**

(Complete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or 6. Complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:

_____ dry metric tons

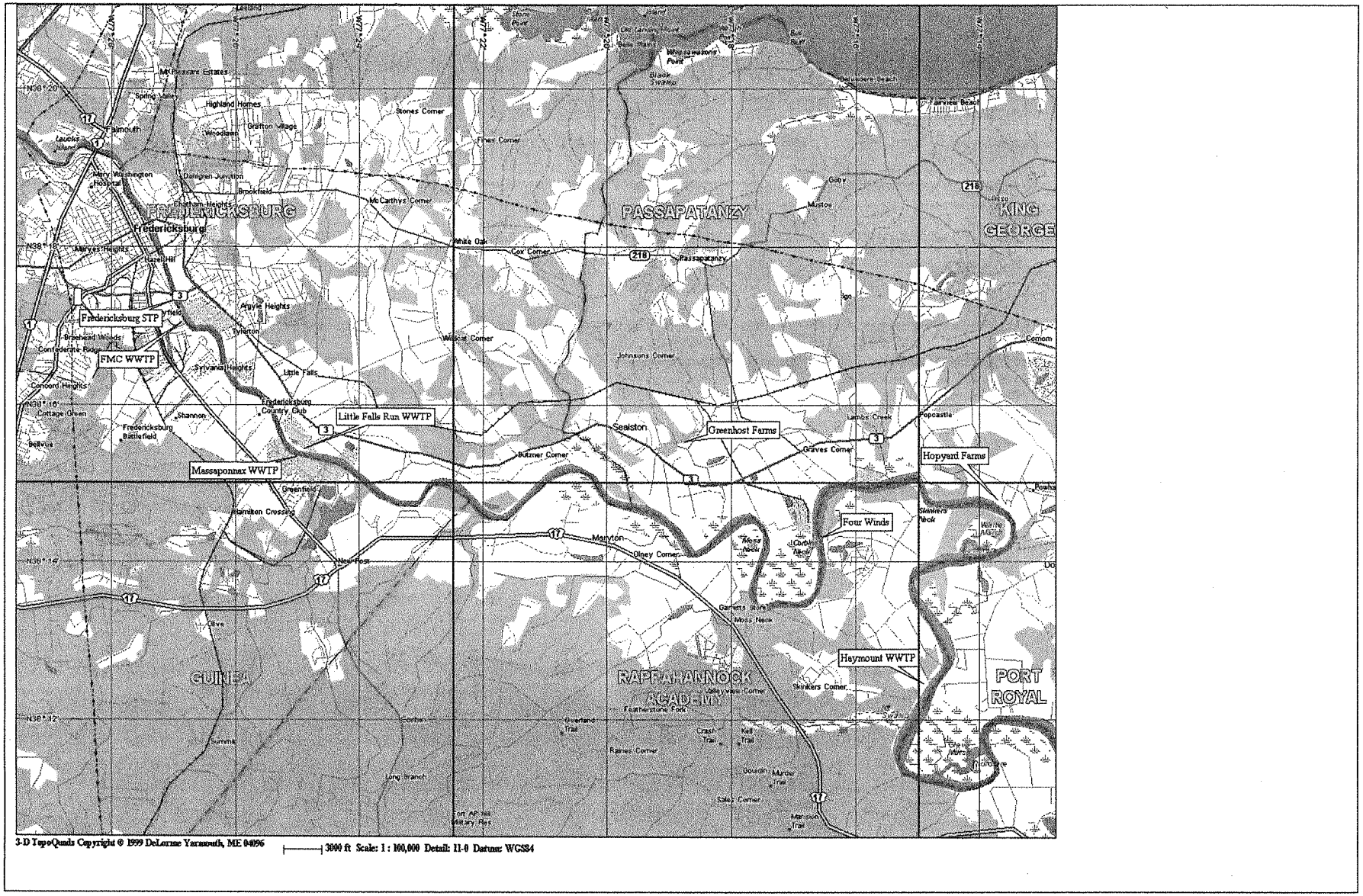
b. Do you identify all land application sites in Section C of this application? _____ Yes _____ No

If "No", submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).

c. Are any land application sites located in States other than Virginia? _____ Yes _____ No

If "Yes", describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

d. Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).



Attachment 4

FIGURE 1 - SOLIDS HANDLING SCHEMATIC

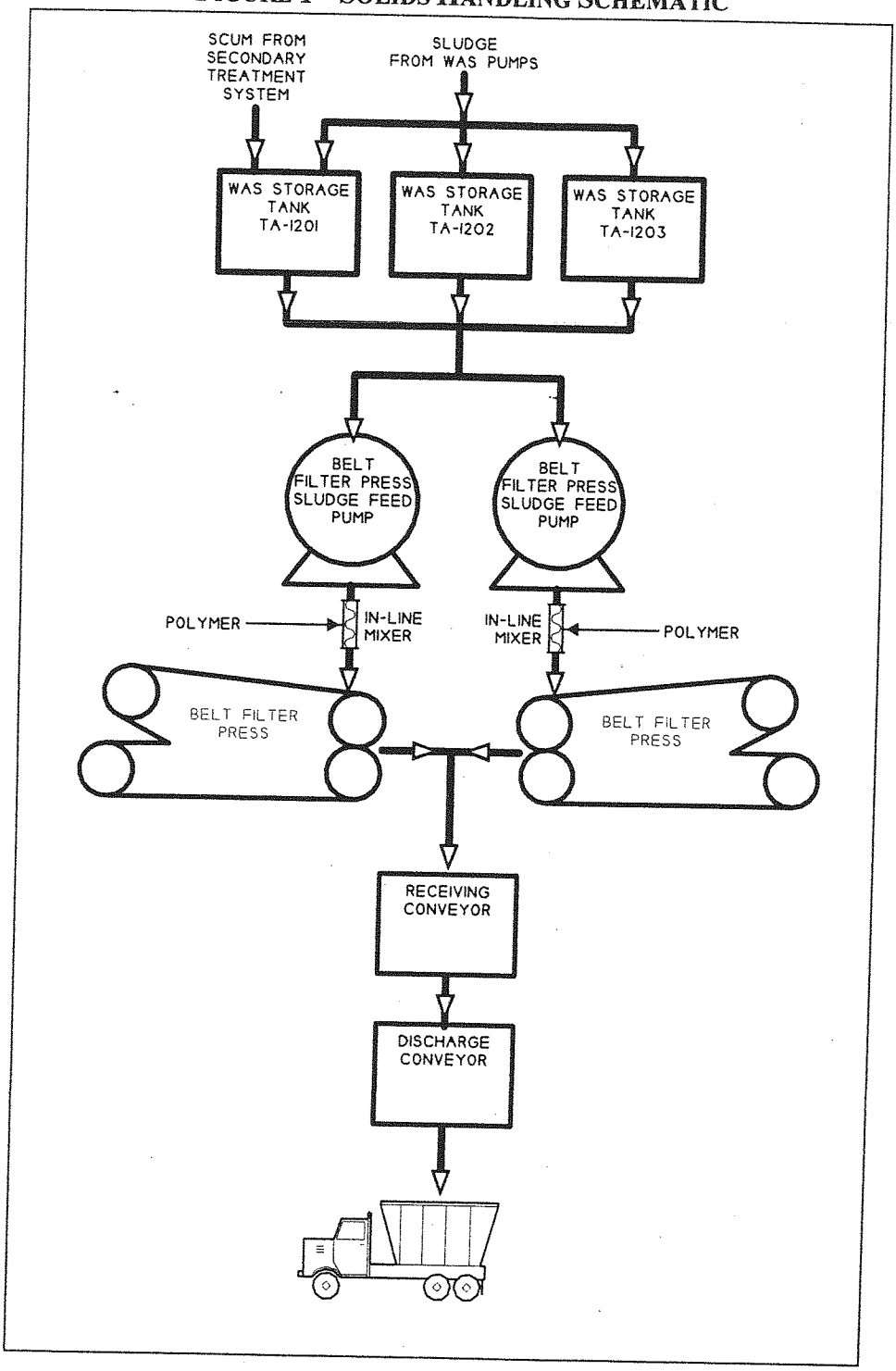
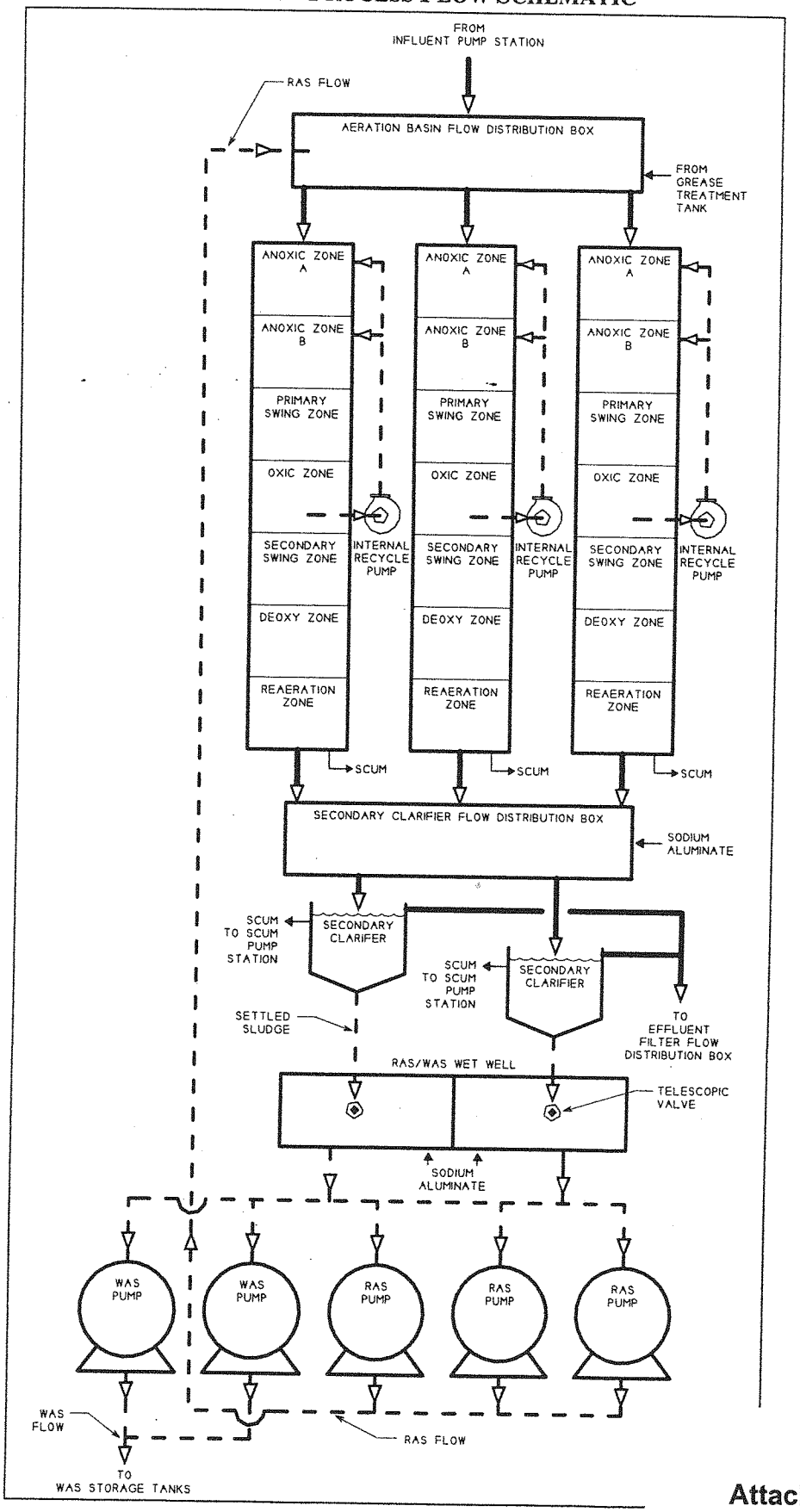


FIGURE 1 - PROCESS FLOW SCHEMATIC



Attachment 2

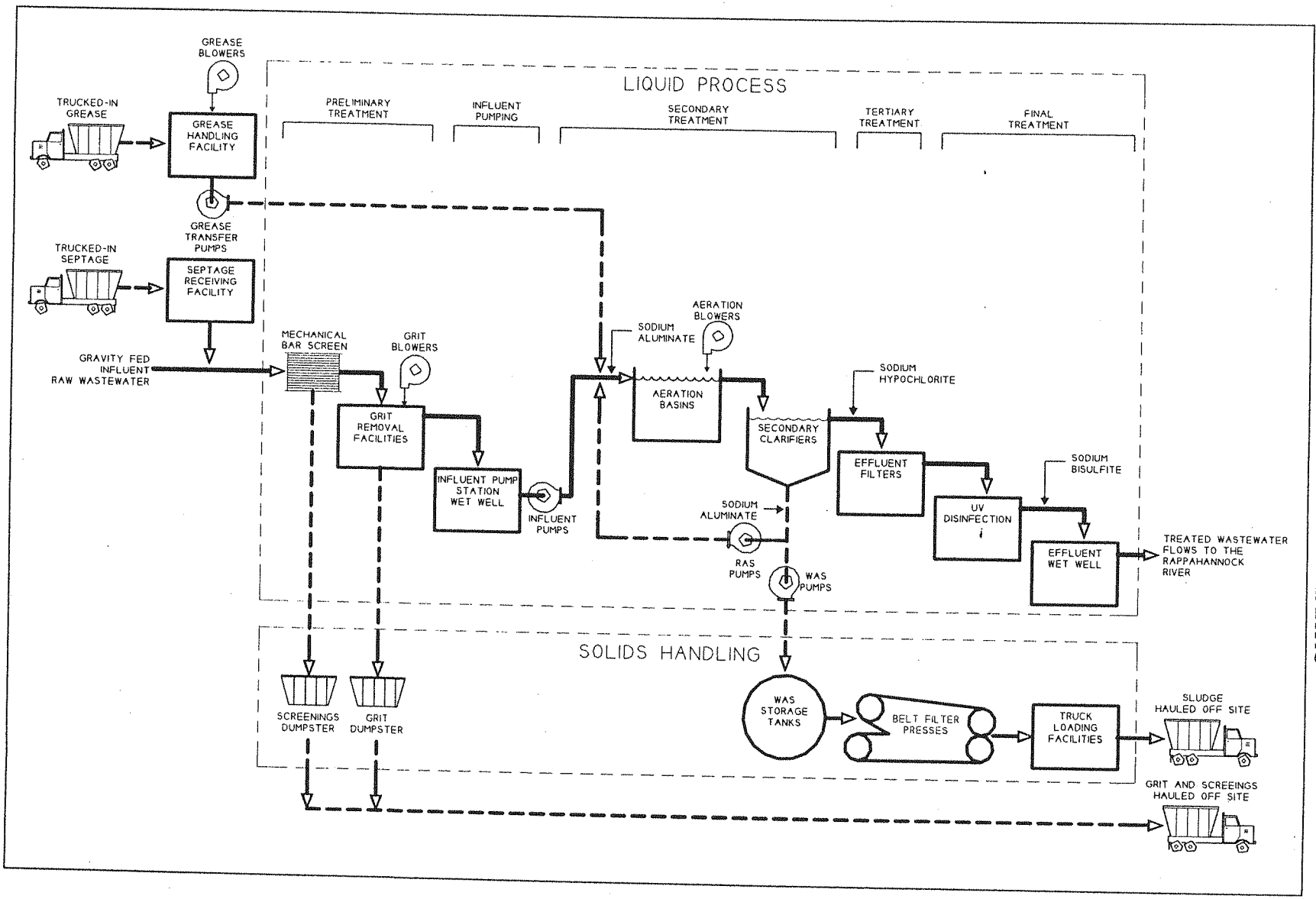


FIGURE 1 - PROCESS FLOW SCHEMATIC

Attachment 3

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Mr. Edward Petrovitch, Director of Utilities

Owner: County of Spotsylvania, Virginia Utilities Dept.

Applicant's Address: 600 Hudgins Road

Fredericksburg, VA 22408-4147

Agent's Telephone Number: 540-507-7302

Authorizing Agent: _____
Signature

VPDES Permit Nos. VA0025658/VA0068110
Facility Names: Massaponax and FMC WWTPs

Please return to:

Anna Westernik
VA-DEQ, NRO
13901 Crown Court
Woodbridge, VA 22193-1453
Fax: (703)583-3821